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COMPETENCIES NEEDED BY TEACHERS OF HEARING IMPAIRED CHILDREN: DEAF AND HARD OF HEARING.

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Prepared by two committees of the American Organization for Education of the Hearing Impaired, the pamphlet provides a guide for formulating standards of professional training for teachers of hearing impaired children. Competencies needed by teachers of the deaf are defined in the areas of communication (speech, hearing, language, lipreading, visual perception), curricular adaptation, psychological tests and measurements, social adjustments, home-school relations, and philosophy of education. For teachers of the hard of hearing, competencies explained include personal characteristics of the teacher, knowledge of auditory comprehension, speechreading, speech, language development, other special knowledge, and essential abilities. Seven recent publications on the preparation of teachers of the hearing impaired are cited. (JB)

# Competencies Needed by Teachers of Hearing Impaired Children:

- Deaf
- Hard of Hearing

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ED022313

AMERICAN ORGANIZATION FOR EDUCATION OF THE HEARING IMPAIRED
*the professional section of the Alexander Graham Bell Association for the Deaf*
Washington, D. C.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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- DEAF
- HARD OF HEARING

AMERICAN ORGANIZATION FOR EDUCATION OF THE HEARING IMPAIRED
*the professional section of the Alexander Graham Bell Association for the Deaf*
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This is a publication of the American Organization for Education of the Hearing Impaired, the professional section of the Alexander Graham Bell Association for the Deaf. Additional copies may be obtained at $1.50 each from the Volta Bureau, 1537 35th Street, N.W., Washington, D. C.

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# FOREWORD

This publication was motivated by the increasing need for standards in professional preparation of teachers of children who have impaired hearing.

Two important Government bulletins, now out of print, contain pertinent recommendations from a study entitled "Qualification and Preparation of Teachers of Exceptional Children" conducted by the U. S. Office of Education:

> Bulletin 1955, No. 6, *Teachers of Children Who Are Deaf,* published in 1956, and reprinted in 1958 and again in 1962;
>
> Bulletin 1959, No. 24, *Teachers of Children Who Are Hard of Hearing,* published in 1959 and reprinted in 1962.

With permission of the U.S. Office of Education, the American Organization for Education of the Hearing Impaired, the professional section of the Alexander Graham Bell Association for the Deaf, has reprinted selected relevant portions of these Bulletins because the competencies described are so basic to the preparation of teachers of the hearing impaired. Thus they should be part of the literature available in the development of current standards.

Standards for teachers of hearing impaired children have been a constant and growing concern. Over the years *The Volta Review* and the *American Annals of the Deaf* have carried more than 40 articles on the subject. Through the impetus of Federal aid under Public Law 87-276 of 1961 and subsequent laws, the output of teachers of the hearing impaired has more than doubled; and 19 new teacher training programs have sprung up within the last two years, giving new importance to the need for developing standards for teacher preparation.

The National Conference at Virginia Beach in March, 1964, resulted in the publication of *Preparation of Teachers of the Deaf,* Bulletin 1966, No. 8, by the Office of Education. The "Babbidge Report" of 1965 noted that several hundred teachers of the deaf were certified by neither the Conference of Executives of American Schools for the Deaf nor by the state in which they were employed, and pointed out the need for a uniform and accepted standard of preparation for teachers. The Conference on Professional Standards, sponsored by the Council for Exceptional Children in Washington, D. C., in May 1965, led to the description of standards for teacher education programs and areas of professional competence for teachers of the deaf and hard of hearing in *Professional Standards for Personnel in the Education of Exceptional Children,* 1966. The Report of the National Conference on Education of the Deaf in Colorado Springs, April, 1967, urged development of standards for preparation of teachers of preschool age children and multiply handicapped deaf children as well as deaf children of school age.

The quality of education for hearing impaired children depends upon the quality of teachers, and the quality of future teachers is directly related to the establishment and enforcement of high standards. We hope this publication, reviving the carefully considered recommendations of a decade ago by outstanding educators of hearing impaired children, will help in the development of such standards.

Donald R. Calvert, Ph.D., *President,*
American Organization for Education of the Hearing Impaired,
the professional section of the
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June 1, 1968

*Part I*

# COMPETENCIES NEEDED BY TEACHERS OF HEARING IMPAIRED CHILDREN:

## DEAF

The 10 members of the competency committee assumed the responsibility of writing a statement concerning the knowledges and abilities which they regarded as essential for teachers of deaf children. It was the function of this committee to define the competencies which were different from, or in addition to, those required by a regular classroom teacher. The committee members were widely scattered throughout the United States, and with the exception of two meetings, did all of their work through correspondence. The complete committee report prefaced by the names of the members is presented in the following pages.


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## THE REPORT

Our report deals with the specific competencies required by teachers of deaf children. We declare at the outset that we are not concerned with the ease and completeness with which our recommendations can be universally implemented. Rather, we trust that the information contained in this report can serve as a useful *guide* for those who wish to initiate *optimal* programs for teacher training and teacher evaluation or for those who wish to modify existing ones, regardless of the organizational context in which the program is carried on.

Before we describe the organizing principle of our report, it is essential that we attempt to define meaningfully the kind of child at whom the recommended competencies are directed. We are aware that a great deal of unnecessary confusion, not only among the laity but among well-intentioned professional workers as well, has surrounded the precise classification of hard-of-hearing and deaf children, and has in turn befogged many discussions of their problems. The confusion seems to stem from the differences in the frameworks of reference to which classification and nomenclature are related. For example, some workers classify the child who develops speech and language prior to onset of deafness as "hard-of-hearing," even though he may not be able to hear speech at any intensity. This child, it is argued, unlike the congenitally profoundly deaf child who has not acquired speech naturally, behaves as a hard-of-hearing child in that his speech is quite natural, and, therefore, he should be classified as "hard-of-hearing." It is obvious in this case that some hazy

educational standard has been the basis of classification. If, however, we consider the same child from a purely physiological standpoint, it is grossly misleading to term him "hard-of-hearing" when for all practical purposes he hears nothing at all.

The situation is complicated further by the use of terms which suggest not only physiological and educational factors but also gradations of hearing loss and even the time of onset. To this category belong such terms as "deaf and dumb," "mute," "semi-deaf," "semi-mute," "deafened," "partially deaf," and others. These terms are of relatively little value from either the physiological or educational points of view and it would be well to eliminate them from general usage.

For purposes of our discussion we need to define the deaf child in terms of the extent to which his impaired ability to communicate by speech and hearing affects his psychological and educational potential. The child with whom our recommended competencies are concerned is the child who has not developed the expressive and receptive skills of communication prior to the onset of deafness. He cannot initiate language through speech nor can he understand the speech of others as is normally done by a hearing child at an equivalent level of maturation. In

*Courtesy, Detroit Public Schools, Special Education Dept.*

**A Teacher Uses Her Ability To Measure Hearing Loss With the Aid of an Audiometer.**

addition, we may be concerned with the child who has acquired some skills of communication (as described above) prior to the onset of deafness but who is at a level of competence in language that requires special technique to develop it.

Obviously, from the physiological standpoint, a child is deaf when his hearing is so impaired that he cannot understand connected speech through the ear even with amplification. We are aware that delimiting definitions are hazardous, and we recognize that in the long run *each child's potential must be assessed individually* so that we avoid being restricted by the tyranny of classification. Nevertheless, we believe that the orientation that we have suggested is necessary for the purpose of this report.

Our analysis of competencies needed by teachers of deaf children suggested that we organize our recommendations around *six areas* of knowledge to which certain abilities of the teacher are related. These areas are: communication; curricular adaptations; psychological tests and measurements; social adjustments; home-school relations; and the philosophy of the education of the deaf. Within each one of these areas we shall delineate certain fundamental knowledge which leads to additional specific knowledge relevant to assessment and instruction of the child. All of this knowledge is then related to specific abilities required by the teacher. Our scheme of delineating areas of knowledge and abilities should not suggest that we fail to recognize the interrelationship of various areas. *Actually, the ability of the teacher to unify and integrate all the areas in her approach to the children is the "sine qua non" of all the competencies.* We labor under no illusion that possession of knowledge about an area insures ability to translate that knowledge into practice. All we can do is state the required knowledge and abilities. Furthermore, how one acquires them is beyond the scope of this report.

Because it would involve needless repetition, we shall not mention under each major area, except where special emphasis is needed, the requirements that the teacher be an intelligent consumer of technical literature, and that she be familiar with the literature peripheral to her field. Here and there we shall use the names of persons related to specific principles or techniques. Our guide shall be the extent to which the common usage of these names conveys information among workers in the profession. Of course, the amount of space allotted to a given topic is in no way proportional to its significance, since the nature of certain areas determines the quantity of material that can be used about them in a report of this type.

## *COMMUNICATION*

It is obvious that the teacher must be well grounded in knowledge of the process of communication as it relates to deaf children, which involves hearing, speech, language, lipreading, and vision.

### Hearing

We can delineate best the required knowledge about hearing by considering it from the point of view of (1) the stimulus, (2) the organism, (3) the response of the organism to the stimulus, and (4) auditory training.

*The stimulus.*—We expect the teacher of the deaf to know about the nature of sound, its measurement and its transduction by electro-acoustic devices. Basically, from the acoustic standpoint, this would involve simple harmonic motion and pure tones and complex sounds from which would be developed concepts of intensity, frequency, phase, resonance, and harmonic analysis. Included would be the principles of sound reflection, absorption, and reverberation. It is not necessary for the teacher to understand the elegant mathematical treatment of these subjects beyond simple algebraic expressions where the latter are applicable. In the area of electricity we include the concept of electrons, neutrons, and protons leading to an understanding of the dimensions of electricity—current, voltage, and resistance, and finally energy. An understanding of the principles of impedance is desirable.

The measurement of the original or transduced stimulus requires knowledge about the decibel (logarithmic scales) and its derivation. The principles of operation of circuit components, such as batteries, generators, microphones, earphones, loudspeakers, resistors, condensers, coils, transformers, attenuators, vacuum tubes, and transistors need to be known, including measuring devices, such as voltmeters and ammeters and their application to sound level meters and audiometers.

The preceding knowledge should lead the teacher to an understanding of the principles of electrical amplification of sound which underlie the design and construction of individual and group hearing aids and the factors which influence the performance of hearing aids, such as gain, frequency response, distortion, and maximum acoustic output (including the notion of compression amplification). It is important to have knowledge about "first aid" for hearing aids.

Modern methods of displaying sound, such as the Visible Speech apparatus, frequency and intensity indicators, oscilloscopes and

their possible application to teaching the deaf, have significance for the teacher.

*The organism.*—The teacher should understand the anatomy, physiology and pathology (including aberrations of structure and function) of the auditory system, and relatively simple interpretations of commonly advanced theories of hearing. This information should be basic to knowledge about the etiology of deafness and the characteristics of the clinical groupings—conductive, perceptive, mixed, central, and psychogenic deafness. Familiarity with preventive principles (hearing conservation programs) and medical (anti-biotics, chemotherapy) and surgical procedures (fenestration, mastoid, tonsils, and adenoids) related to deafness is important.

*The response of the organism to the stimulus.*—We recommend that the teacher be familiar with the basic psycho-physical methods as they relate to the measurement of such aspects of hearing as loudness, pitch, differential sensitivity, masking, fatigue, and tolerance involving relevant stimuli, such as noise, pure tones, and speech. These concepts should undergird an understanding of the clinical techniques of assessing hearing and the classical interpretations of results—tuning forks, audiometry by pure tones, and speech and electro-encephalography, including the approach through conditioning, such as psychogalvanic skin resistance and peg boards. Not to be overlooked are the insights required for judgments by the tester of startle responses and the relation between voice quality and hearing.

*Auditory training.*—Of great significance is knowledge of techniques of giving the child meaningful differential auditory experiences involving environmental sounds and interpretation of speech using many forms of amplified sound, such as the "live" voice and recorded material.

Out of the knowledge recommended for hearing should grow the abilities: to consult constructively as consumers with architects and/or acoustic experts concerning sound treatment requirements for rooms in which deaf children are taught; to evaluate for educational purposes various instruments which display sound; to advise concerning the purchase of individual and group hearing aids; to use and manipulate intelligently hearing aids, recording devices, and other electro-acoustic equipment used for teaching; to detect improper or inadequate performance of equipment and to make minor repairs; to administer individual and group audiometric (speech or pure tone) tests; to assess a child's

*Courtesy, John Tracy Clinic, Los Angeles*

**A Deaf Child Makes Full Use of Amplifying Equipment.**

educational potential through hearing by evaluating formal hearing tests and subjective impressions; and to develop optimum use of residual hearing in all phases of the instructional process.

## Speech

We shall consider the required knowledge about speech under the following headings: (1) the nature and production of speech, (2) the assessment of speech, and (3) instruction in speech.

*The nature of speech.*—The teacher should be familiar with the development and production of "normal" speech in normal hearers and should be introduced to the contributions to our

understanding of the speech process from the fields of linguistics, acoustics, psychology, and physiology.

Specifically, the teacher should know the anatomy and physiology of the mechanisms related to the production of speech. She should relate this to information about the factors in speech which contribute to intelligibility, such as articulation (of the phonemes and combinations thereof), voice quality, temporal patterns involving rate, pitch changes, stresses, and accents. Knowledge about how the speech of the deaf deviates with respect to these factors is essential.

*Assessment of speech.*—The teacher should be familiar with tools and techniques for assessing and diagnosing difficulties of speech of deaf children. These include rating scales, articulation check lists, formal tests of intelligibility, interviews, group auditing, including indirect methods, such as kymographs and audiospectrometers.

*Instruction in speech.*—It is imperative that the teacher know some of the major systems of orthography, particularly those frequently used in teaching speech to children who are deaf. Among the prominent systems are the International Phonetic Alphabet, the Northampton Charts, diacritical marks, Alcorn symbols, and various color codes intended to differentiate the production of the elements of speech. Among the classical approaches to developing and improving the speech of deaf children she should know the continuum from the so-called analytical or elemental to the synthetic and "natural" techniques, including fixed methods such as "babbling," and those methods which stress more or less touch (vibration), vision, hearing, and kinesthesia.

The teacher should then be able to detect, assess, analyze, and frequently to imitate the abnormalities of speech at all levels of the deaf child's development, to plan a program of speech development, to implement eclectically and rationally approaches and systems of teaching speech to the deaf, to use critically various mechanical aids (hearing aids, models, "translators"), and, finally but significantly, to motivate speech in deaf children.

## Language

The knowledges recommended in the area of language, ***the basic "stuff" of communication***, lend themselves to organization around (1) the developmental psychology of language in hearing children, (2) assessment and understanding of language problems for the deaf, and (3) instruction in language.

*Developmental psychology*.—The teacher must know the patterns of language development in normal children, particularly those which relate to concept formation and the verbalization of experience, associated with growth in vocabulary and structured language. An understanding of the configurational properties of language is essential, including (*a*) the syntactical patterns associated with parts of speech, classes of words, word order, grammatical principles of modification; and (*b*) the semantic rules that relate words or sentences to things and events.

*Courtesy, Univ. of Illinois, Springfield, Division of Services for Crippled Children*

**Deaf Child Learns Names of Objects.**

*Assessment and understanding of particular language problems of the deaf*.—Familiarity with the characteristic language difficulties at all levels of the verbal development of the deaf child is of prime significance. These include such frequently occurring problems as use of articles, word order and tense, verbalization of abstractions, multiple meanings of words and colloquial and idiomatic expressions. The teacher must be aware of the limitations of "language tests" (aptitude, diagnostic, and achievement) for the hearing in assessing the language of the deaf child, and yet she needs to know how to determine the child's level of expressive and receptive development as it relates to the ideal of "normal" language usage of hearing children.

*Instruction in language*.—As a guide in planning the steps necessary to insure the development of functional use of language by

deaf children, it is important for the teacher to know about traditional and evolving approaches to teaching language known as "natural," Five Slate, Vinson, Fitzgerald, Wing, and other "systems." At all times she must be sensitive to certain critical relations, particularly the child's ability to verbalize and to conceptualize, and his development in language and speech.

## Lipreading

The required information about lipreading involves (1) the lipreading process, and (2) assessment and instruction in lipreading.

*The lipreading process.*—The teacher must understand the lipreading process as it relates to certain physical factors, such as lighting, visibility of movement of talker's lips and face, vision, and other factors such as degree and kind of hearing loss, language development, age of onset of deafness, intelligence, and educational achievement.

*Assessment and instruction in lipreading.*—Familiarity with the possibilities and limitations of formal testing materials (Utley and Heider tests) and ways of assessing informally ability in lipreading is essential. The teacher should know the traditional and emerging approaches to teaching lipreading to deaf and hard-of-hearing children and adults that lie on the analytic-synthetic continuum. This implies knowledge about the materials and aids to teaching available through the audio-visual-kinesthetic, the Jena, the Müller-Walle, the Nitchie, the Kinzie, and other approaches.

## Vision

In concluding our discussion of the required knowledge in the area of communication, we should mention the need for the teacher to have insights into the problem of visual perception, since the deaf child is likely to receive the major portion of this information through vision. Such topics as span of perception, fluctuations of perception, grouping of stimuli, influence of context, and precision of perception are relevant to an understanding of the visual tasks confronting the deaf child.

The teacher must then be able to assess lipreading ability, to evaluate formal tests of lipreading ability, to plan a program of growth in skill in lipreading appropriate to the child's level of language and educational development, to adapt eclectically instructional procedures derived from frequently practiced ap-

proaches, and to create suitable motivating devices and situations that further growth in lipreading skill.

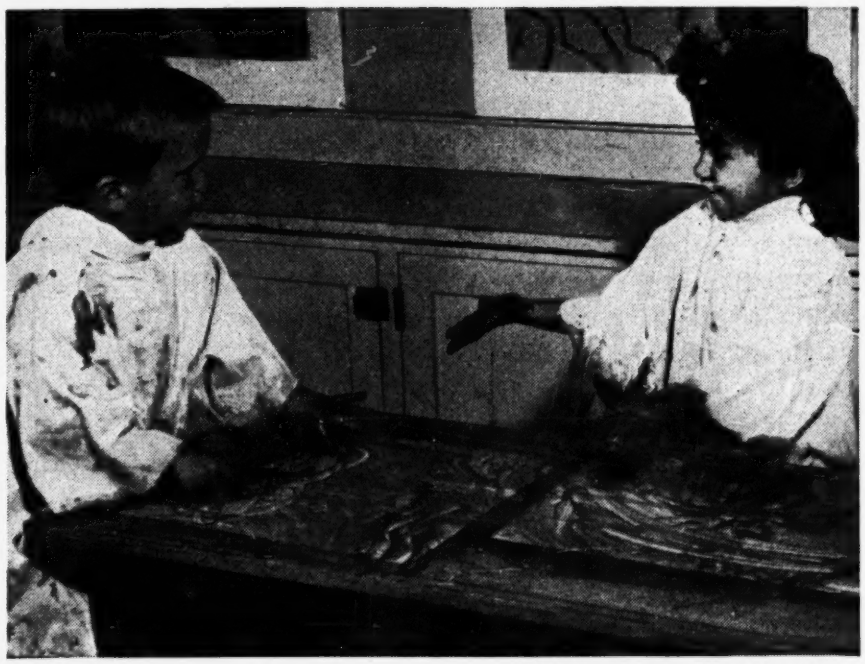
## *CURRICULAR ADAPTATIONS*

Curricular adaptations involve the knowledge and skills necessary for adapting reasonably well-accepted curricula for the hearing to the needs of deaf children. It is assumed that the teacher has been introduced to the various philosophies of education (realism, idealism, experimentalism) which underlie determination of the content of the curriculum. Under recommended information about the curriculum the following topics will be considered: (1) general adaptations, (2) reading, and (3) subject-matter areas.

*General adaptations.*—The teacher must be familiar with techniques of dealing with the commonly encountered academic "retardation" resulting from lagging development of skills of communication; for example, the heavy vocabulary loads and complex language structure contained in "subject-matter" materials of instruction. In general, this means the teacher must know the techniques for adapting the curriculum to the appropriate conceptual and verbal levels of deaf children of all ages. Obviously she must possess information about teaching materials suitable for the deaf child.

*Reading.*—Reading is mentioned particularly because it pervades the entire curriculum (it could have been included under communication) and because it is likely that the deaf child and adult are relatively more dependent for information on the printed symbol than the hearing. The teacher must be keenly aware of the concept of readiness as it relates to the time for beginning reading and for determining appropriate language maturity and preparation for reading at all levels. She must also be familiar with techniques for the day to day evaluation of reading progress and ways for the detection of emerging difficulties in reading. We recommend that the teacher know the various, though differing, techniques for developing the basic reading skills, such as word recognition, sentence interpretation, and paragraph meaning. Of course, there must be a critical sensitivity and knowledge of the conflicting opinions and evidences about silent and oral reading for the deaf.

*Subject-matter areas.*—The teacher must know the techniques of adapting rather abstract concepts to the child's ability to verbal-



*Courtesy, Los Angeles City Schools, Special Education Section*

**Deaf Children Enjoy Finger Painting as Part of Their Nursery School Program.**

ize; for example, concepts of space, time, natural and social forces in the social studies and in science. In arithmetic there is the particular need to know about relating computational skills to problems involving complex language. It is desirable that the teacher know about arts and crafts for various levels and that she familiarize herself with the activities of specialists in music, physical and health education, home economics, manual arts, and vocational training for the deaf.

The teacher, in short, should be able to select teaching material and content appropriate to the child's level of maturity and to adapt that material and content to the requirements of the child's limitations of communication. She should be able to use mechanical aids to instruction such as projectors and models.

## *PSYCHOLOGICAL TESTS AND MEASUREMENTS*

The teacher should have an understanding of the manner in which exceptional children of all types deviate with particular emphasis on how a second handicap added to deafness affects a child's development. Specifically in the area of psychological tests and measurements, the teacher needs to know (1) basic information relating to tests and measurements, (2) information relating to tests and measurements for the deaf.

*Basic information.*—Knowledge of elementary statistical concepts such as frequency distributions, measures of central tendency, measures of variability, and coefficients of correlation is recommended.

*Tests and measurements for the deaf.*—The teacher needs to be familiar with the evaluation, interpretation, and limitations of intelligence, personality, aptitude, achievement, social maturity, and diagnostic tests and measurements used with the deaf, particularly where language is involved. She should know about tests and test items that have been useful with the deaf; for example, in intelligence testing—the Hiskey, the Ontario, the Kohs Block Design, the Goodenough, the Leiter, the Randall's Island, and other instruments.

From her knowledge of and sensitivity to psychological tests and measurements the teacher should develop the ability to recognize multiple handicaps, to suggest and to carry out within reasonable limitations a program for dealing with the additional handicap, to evaluate critically scientific studies related to the education of the deaf that use statistical methods, to interpret intelligently and constructively the reports of psychologists and counselors, etc., to implement the latter's suggestions for guidance, and to assist in the administration of tests requiring her cooperation.

## *SOCIAL ADJUSTMENTS*

It is essential for the teacher to know the problems and mechanisms relating to the adjustment of deaf children and adults to their families and communities. She must have information about (1) the social limitations imposed by deafness, and (2) the techniques and resources for facilitating adjustment.

*The social limitations imposed by deafness.*—The teacher needs to have knowledge of desirable occupations for the deaf, of insurance practices and legislation as they affect the deaf, of the implications of what amounts to minority group status through segregation in special schools and classes, of the effects of isolation from other deaf people, of the problems connected with religious needs and with certain types of recreation, and of the misunderstandings of the general public about the capabilities and aspirations of the deaf.

*Facilitating adjustment.*—The teacher should know ways of assessing the child's status in his family and in his community,

and she should be familiar with the local and national agencies and groups that can assist through literature and direct programs in the adjustment process. These include the Volta Bureau, the National Association of the Deaf, local religious and fraternal organizations, offices of vocational rehabilitation, and others.

The teacher should be able to participate congenially in extramural activities of the deaf, to interpret to the deaf their possibilities in society, to establish professional public relations with outside agencies and interpret the deaf child to them, to impart interpretive information about the deaf to laymen and the child's associates in the community, and to offer basic guidance to parents related to the child's social adjustments, present and future.

## *HOME-SCHOOL RELATIONS*

The rich possibilities for furthering the development of deaf children inherent in well-conceived home-school relations suggest that the teacher be equipped with (1) general knowledge of home-school relations, and (2) techniques and resources for furthering home-school relations.

*General knowledge of home-school relations.*—It is desirable for the teacher to know the role the parents can take in augmenting and enriching the educational program of the school, the factors determining the extent of effectiveness of a parent-supplemented program, and the unique psychological, educational, and sociological problems faced by parents of deaf children.

*Techniques and resources for home-school relations.*—The teacher needs to be familiar with the various procedures that have been found useful in promoting home-school relations. These include group discussions, lectures, demonstrations, correspondence, appropriate publications, formal parent institutes and clinics, home and school visits. She should know the peripheral professional resources available to guide parents in cooperation with the school such as otologists, pediatricians, psychiatrists, psychologists, and social workers.

The teacher's awareness of constructive home-school relations should enable her to plan and to implement a program with parents to meet their needs in understanding the problems of their deaf children at all age levels, to make optimum use of community resources in parental guidance, to translate and interpret when the occasion warrants professional knowledge and

attitudes about the education of the deaf so that they have meaning and significance for parents.

## *PHILOSOPHY OF EDUCATION OF THE DEAF*

In the broad area of the philosophy of education of the deaf the teacher should know (1) the historical evolution of modern approaches, (2) organization and administration, and (3) current issues and trends.

*Historical evolution of modern approaches.*—It is desirable for the teacher to be familiar with the sporadic period in the education of the deaf which led to the so-called French and German systems (with variants) and their influence on the rise of the education of the deaf in the United States. It is important to know about the influence of significant persons such as the Gallaudets, Fuller, Yale, Bell, and Goldstein on the evolution of various approaches to the deaf and their philosophical implications in terms of setting educational goals.

*Organization and administration.*—The teacher must know the types of organization and administration related to public residential schools, various types of day schools and parochial and private schools, including an understanding of the common legislation affecting the education of the deaf.

*Current issues and trends.*—The education of deaf children, as of all children, is constantly undergoing critical examination and evaluation by individuals and groups within, peripheral to, and outside the profession. The teacher of the deaf needs to be thoroughly familiar with the issues and trends that emerge from this process. At the time of writing this report some of these were the "oral-manual-combined" issue, the rise of the preschool movement, the role of the university and hospital speech and hearing clinic, the use of group and individual hearing aids, the education of the deaf with hearing children, the relative merits of day and residential schools, and the competencies required for teachers of deaf children.

The teacher must be able to examine critically the contribution of the past and current issues and trends in order to formulate an adequate set of principles to guide her in the instruction of deaf children. Furthermore, she herself may be able to create and to initiate constructive principles and the techniques which stem from them.

*Part II*

# COMPETENCIES NEEDED BY TEACHERS OF HEARING IMPAIRED CHILDREN:

## HARD OF HEARING

WHAT SPECIAL COMPETENCIES are needed by teachers of hard of hearing children? What are the distinctive responsibilities and activities of these teachers? Do they need personal qualifications different in degree or kind from those required of other teachers?

This section contains the report of the opinions of a committee of experts and the information on teacher evaluation of competencies from the inquiry forms, as well as a comparison of the two. A discussion of the inquiry form precedes that subsection.

A committee of experts was asked to identify and describe competencies required of teachers of hard of hearing children. Members of this committee were selected, insofar as possible, because they had had relevant teaching experience, supervisory or administrative responsibilities, or experience in educational programs preparing teachers in this area.

The committee members prepared a statement, not necessarily reflecting existing standards or curricula, but expressing rather their own convictions and practical ideals. They attempted to formulate a statement of those particular competencies—that is to say, specialized skills, knowledges, and understandings—which differ in degree or kind from the ones required of regular classroom teachers.

The committee was regarded as autonomous and alterations in its report were made only by committee action.

### *The Committee Report*

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*Courtesy of The University of Kansas Medical Center*

**Watching, touching, and listening: an eager child learns to communicate**

## INTRODUCTION

In this report the committee will present the distinctive competencies that should be required of teachers of children who are hard of hearing. These specially trained teachers should possess not only the competencies to be described in this report, but should also possess knowledge of the philosophy, organization, curriculum, and methods of general education. A teacher who has these competencies can help the child with a hearing impairment to advance to his highest potential and to adjust himself to a society composed mostly of hearing individuals.

The child who is hard of hearing is essentially a normal child entitled to a total program of education that will provide him with the basic education desirable for all children who are to grow into responsible citizens. In addition to the education common to all children, he should receive compensatory education in auditory comprehension, speechreading (lipreading), speech, and language. He should be taught to make the best use of a hearing aid if he can be properly

fitted. *Whenever possible, his entire education should be obtained in a normal environment at home, school, and play.*

The regular classroom teacher cannot be expected to provide both basic and compensatory education for the child who is hard of hearing. A teacher with special knowledge, skills, and abilities in handling the problems of children with hearing impairments is needed to supplement and complement the classroom teacher. Such a specially qualified teacher will be invaluable, too, in promoting and establishing a better understanding by society of all the problems facing those with hearing impairments.

## DEFINITION

For educational purposes, hard of hearing children are those with hearing problems whose total achievement in hearing, speech, and language permits them to function satisfactorily with or without a hearing aid in a school with normally hearing children. The greatest common need of this group will be help in acquiring, by means of auditory comprehension, speechreading, speech, and language training, the skills for serviceable communication in a world of normally hearing children.

Children cannot be classified as hard of hearing solely by reference to quantitative measurements in decibels or percentages, or even by reference to limited qualitative terms, such as the type of hearing loss, speech discrimination scores, and so on. Not only is the extent of the handicap dependent upon the degree of loss, the type of loss, and the age of onset, but also on many other factors such as the child's intelligence, personality, special training, the attitude of his parents and himself toward the handicap, and the nature of the school situation and other environmental factors. Physical discomforts such as dizziness, head noises, and recruitment, which may accompany some hearing losses, must be considered also in determining the extent of the handicap.

The term "hard of hearing" refers to those auditorially handicapped children who make use of hearing in acquiring the major part of their speech and education. Essentially equivalent terms in this report are "the hearing handicapped," "children with hearing impairments," and "children with impaired hearing."

## PERSONAL CHARACTERISTICS OF THE TEACHER

A teacher who is to work with the child with a hearing impairment needs specific personal characteristics over and above those necessary for every teacher of children. These characteristics may be different

in degree or kind from those needed by the teacher of normally hearing children.

The special teacher's voice, articulation, and speech patterns should be of the highest quality. Functionally normal mouth and lips upon which speechreading depends are imperative for teachers of children with hearing impairments. Normal hearing is an asset, but a teacher with a hearing loss may be acceptable if the quality and quantity of his hearing, with or without a hearing aid, permits him to function with the competencies described later in this report.

The committee has assumed that those who are willing to accept the discipline of the special training necessary to teach children who are hard of hearing have a sincere desire to teach exceptional children. The teacher will need the ability to project warmth and understanding to the child, and to accept the child and his hearing problem realistically and without untoward emotionality. Because he deals with children who have a complex problem and with educators and parents who may not fully understand this problem and are limited in their abilities to help, the teacher will need special insights. He should have a well adjusted personality able to cope effectively with personal frustration. Because he is often the only teacher with this specialty in a school system, and has only limited opportunity to obtain help from discussion with fellow specialists, he must be resourceful in using his own abilities and judgements. He must keep abreast of developments in his area of specialization by reading the professional publications, attending meetings, and in other ways continuing his training and professional growth. Like all other teachers who are called upon to work effectively with pupils, parents, and professional associates, he should be intellectually curious and openminded.

The teacher of children who are hard of hearing must be able to help his pupils to compensate for their hearing deficiencies by the cultivation of visual competencies. The teacher must have an artistic ability to create, or select and use, materials that will help to develop the child's ability to discriminate visually.

## AUDITORY COMPREHENSION

The unique competencies of teachers of hard of hearing children center around two aspects of communication, namely, comprehension and expression. The first in development and, in a sense, the dominant avenue of comprehension of language for all children is hearing. Vision is a secondary avenue which is helpful in discriminating between words that are acoustically very much alike (for example, tool, pool). Recent technological developments in electronics have

*Courtesy of Downtown Center, Indiana University, Indianapolis, Ind.*

Games motivate auditory comprehension

made it possible for many more children with hearing impairments to use their hearing as a primary channel of reception of spoken language. *The training program of the child who is hard of hearing, whatever the degree and nature of the hearing impairment, must have its basis in the auditory presentation of language.*

The goal of the auditory comprehension program is to develop the maximum use of residual hearing with or without a hearing aid. The teacher does not expect to alter the sensory threshold of hearing. Apparent improvement in hearing is a result of the improved interpretation or discrimination of sound clues that are available along with the visual clues that can be seen on the face of the speaker and the contextual clues that are inherent in the situation itself. The acquisition of a properly fitted or prescribed hearing aid facilitates auditory comprehension for some children, but the hearing aid itself does not assure auditory comprehension, nor can a hearing aid be used to advantage with every type of hearing loss. In order to develop the skills necessary for effective teaching in the auditory comprehension program, the teacher must have the following basic knowledge:

KNOWLEDGE of the purposes of auditory stimulation to develop comprehension.

KNOWLEDGE of the relationship between perception of speech and the hearing loss as measured by audiometric and other recognized tests in hearing (such as those involving speech sound discrimination, recognition of spondee words, the use of PB lists, measurement of tolerance thresholds).

KNOWLEDGE of the limitations of hearing imposed by various types and degrees of qualitative and quantitative loss, recruitment, tinnitus, and tolerance characteristics.

KNOWLEDGE of the effect of previous auditory experience, language development, intelligence, personality, and attitudes of the child and his parents toward the hearing loss.

KNOWLEDGE of the significance of particular types and degrees of hearing loss with respect to the total educative process.

KNOWLEDGE of the principles of amplification and related matters involved in the selection, care, and use of hearing devices.

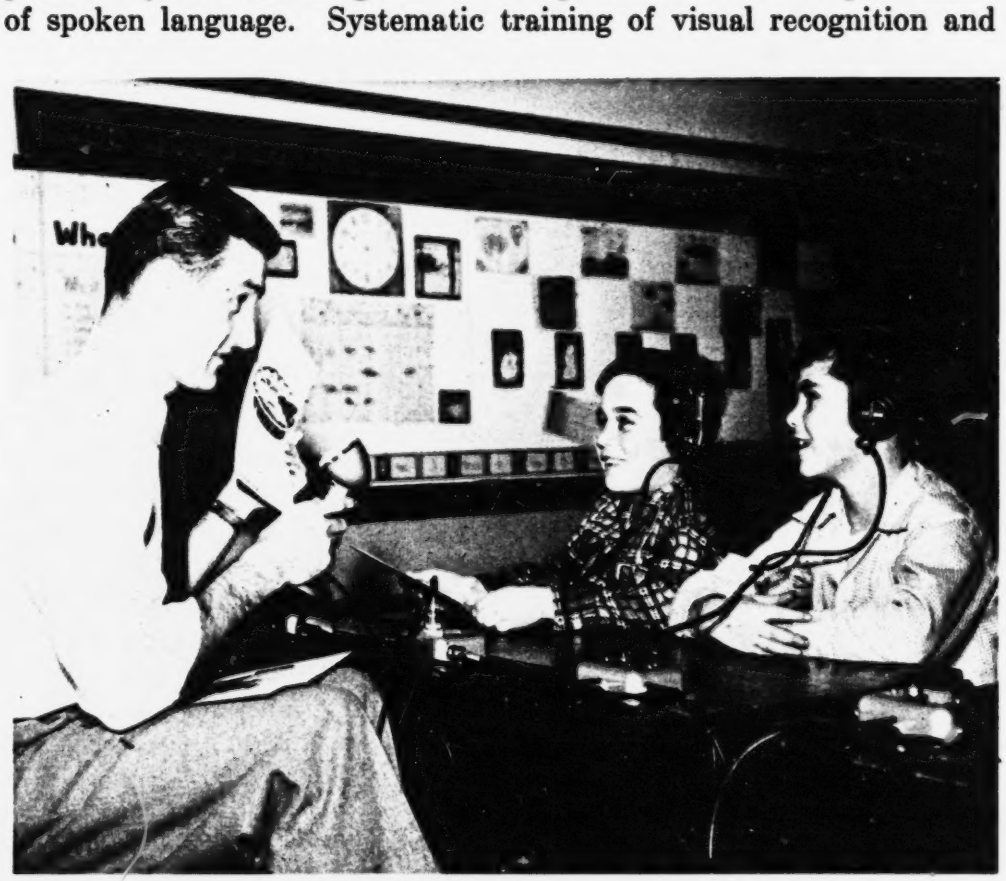
KNOWLEDGE of the techniques, textbooks, methods, materials, and equipment employed in teaching auditory comprehension.

KNOWLEDGE of methods of evaluating progress in auditory comprehension.

KNOWLEDGE of the problems in public understanding of auditory comprehension.

## SPEECHREADING

Teachers of children who are hard of hearing must also be competent to provide training in the development of visual comprehension of spoken language. Systematic training of visual recognition and



*Courtesy of Decatur Public Schools, Ill.*

Speechreading leads to rapid understanding

comprehension of the movements of the speaking mechanism is a part of the speechreading program. A child with a hearing impairment will need to use his vision to help discriminate between words that are acoustically very much alike. Speechreading, a primary compensation as well as a supplementary skill, has as its goal the interpretation and discrimination of visible speech movements which, when combined with the auditory and contextual clues, result in understanding the speaker. The teacher should be proficient in teaching at least one method of speechreading and should have the following knowledge:

KNOWLEDGE of the relationship of speechreading to the child's total education.

KNOWLEDGE of emotional factors affecting success in speechreading. (For example, a very good speechreader may understand his principal readily when sent to the office on an "honor" errand, but may fail to speechread the same words on the same lips when a disciplinary act is anticipated.)

KNOWLEDGE of the formation of speech sounds, and how they appear to the speechreader.

KNOWLEDGE of the effect on sounds in connected speech of such factors as rate, rhythm, assimilation, and relevant personal speech characteristics.

KNOWLEDGE of the limitations of speechreading. (Almost half the sounds of English speech are invisible or obscure even on the lips of a person who has good speech. Many of the remaining visible sounds may be lost to the speechreader due to circumstances beyond his control such as the distance, poor light, unusual lip structure or lip movement patterns, and the rapid and carelessly enunciated speech of the general public.)

KNOWLEDGE of current methods of teaching speechreading.

KNOWLEDGE of materials and procedures in preparing original speechreading lessons to meet the needs of the individual child.

KNOWLEDGE of the relationship of auditory and visual clues and their simultaneous use in communication.

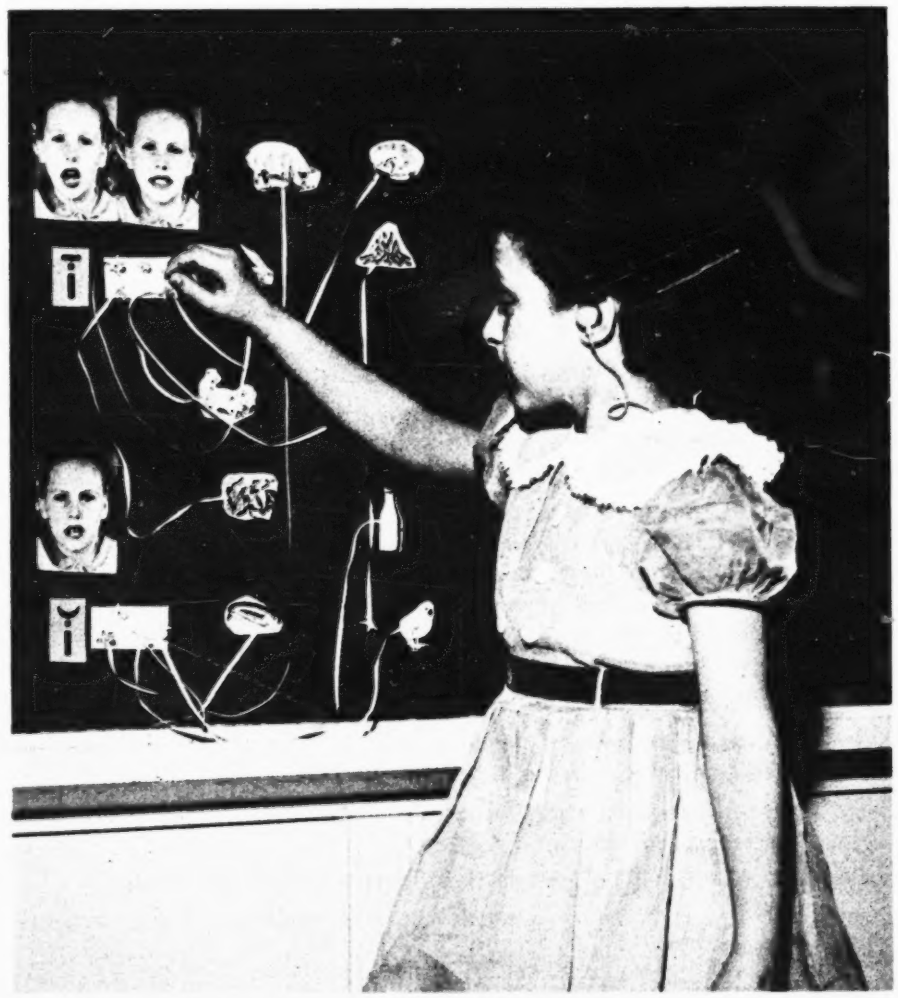
KNOWLEDGE of methods of evaluating progress in speechreading.

KNOWLEDGE of methods of helping others to understand the speechreading process.

## SPEECH

The development of speech is normally dependent upon the auditory impressions that the child has received and continues to receive with or without a hearing aid. Impaired hearing involves, potentially or actually, some degree of distortion of auditory perception. The child with a hearing impairment, therefore, may be expected to speak in a manner which reflects this distortion. Not only does hearing play a primary role in the development of speech, but it continues to function as a basic feedback system by which the speaker monitors his speech. The teacher of the child with a hearing impairment must know how to develop and maintain adequate speech and language habits.

Vocabulary, articulation, pronunciation, rhythm, intonation patterns, and grammatical construction are all parts of the verbal expression of ideas which cannot be dealt with as isolated entities. The goal of speech training is to develop adequacy of speech which can best be



*Courtesy of Downtown Center, Indiana University, Indianapolis, Ind.*

Learning about sounds. This can be done in several ways

described as *the use of audible symbols that can be easily understood by a listener with normal hearing.* The teacher must have the following knowledge:

KNOWLEDGE of the orderly development of speech in both normally hearing children and those with impaired hearing.

KNOWLEDGE of the range and variety of normal speech patterns and the essential differences between those patterns and significant deviations from them.

KNOWLEDGE of phonetics, including the International Phonetic Alphabet.

KNOWLEDGE of the principles and mechanics of production of sounds in isolation and in the context of syllables, whole words, phrases, and running speech.

KNOWLEDGE of the principles and mechanics of voice production.

KNOWLEDGE of principles and methods of speech correction, including procedures involved in the utilization of visual, tactile, and kinesthetic, as well as auditory stimulation.

KNOWLEDGE of speech correction techniques for children who are hard of hearing and who also have other impairments such as cerebral palsy and clefts of lip or palate.

KNOWLEDGE of relationship of type and degree of hearing impairment to speech perception.

KNOWLEDGE of procedures to enable those individuals who have a sudden loss of hearing to retain as nearly as possible their established normal speech and voice patterns.

## LANGUAGE DEVELOPMENT

Language is the basic factor in human communication, and children first learn to use this complex symbol system through the auditory sense. Children with hearing difficulties must learn both the symbols (words) and the conventional use of these symbols in phrases and sentences. Two sentences, "Is it not so?" and "It is not so," illustrate the point. The same words (symbols) are used in slightly

*Courtesy of Prince Georges County Schools, Md.*

Language requires the learning of symbols and their use

different order to convey very different meanings. The child who is hard of hearing will miss the implications of rhythm and inflection in the two sentences. He will have to be taught formally to associate meaning with each conventional pattern. The goal in language development is to teach hearing impaired children to understand the variety of meanings of words and the structure of language and to use this knowledge in communication. To meet this goal the special teacher must have knowledge as follows:

KNOWLEDGE of language development in children with normal hearing and the influence of hearing impairment on the acquisition of language.

KNOWLEDGE of methods of teaching language to children with normal and impaired hearing.

KNOWLEDGE of the methods of teaching reading to children with normal and impaired hearing and the influence of hearing impairment on the development of reading comprehension.

KNOWLEDGE of principles of acceptable English usage.

## OTHER SPECIAL KNOWLEDGE

There is other special knowledge needed by the person who will teach the hard of hearing child:

KNOWLEDGE of legislation and policy regulations governing the education of children, particularly those with impaired hearing.

KNOWLEDGE of principles of mental hygiene and personality adjustment, especially as these are concerned with the problems attendant upon the impairment of hearing.

KNOWLEDGE of essential facts and principles of child development and child psychology.

KNOWLEDGE of basic anatomy, physiology, and neurology of hearing.

KNOWLEDGE of medical and nonmedical aspects of the conservation of hearing.

KNOWLEDGE of the essential facts and principles of the physics of sound and of hearing.

KNOWLEDGE of testing and evaluation procedures employed by other professional personnel in the examination and diagnosis of children who are hard of hearing, and of procedures customarily followed in assisting such children and their parents in availing themselves of the services of other professional personnel.

KNOWLEDGE of the personal and social adjustments that may be required of children with hearing impairments in an environment of normally hearing persons.

KNOWLEDGE of essential facts and principles of construction, maintenance, and use of equipment and materials employed in the instruction of children with impaired hearing.

KNOWLEDGE of basic structure, functions, operating policies, and procedures of schools, hospitals, clinics, national and local organizations, and other agencies serving the hard of hearing.

KNOWLEDGE of the school curriculum of each child served and the special needs and potentials of each child in adapting to the curriculum, as well as the possibilities and means of adapting the curriculum to the child.

## ESSENTIAL ABILITIES

In order to be maximally effective, the teacher must also cultivate the abilities that are essential in translating knowledge into competent instruction. The teacher of children who are hard of hearing needs, therefore, to possess the following:

ABILITY to give appropriately detailed and systematic instruction and to utilize the immediate occasion for such instruction in auditory comprehension, speechreading, speech correction, and language.

ABILITY to administer tests and examination procedures essential in the diagnostic evaluation of the hearing problems of individual pupils which is basic to effective programming.

ABILITY to adapt speech correction procedures and materials to needs, interests, and abilities of specific children.

ABILITY to motivate children with impaired hearing to cultivate and use better speech and language.

ABILITY to interpret the child's hearing loss and associated problems to his parents, teachers, and other persons concerned with the child's health, education, and general growth and development.

ABILITY to provide language situations for spontaneous expression.

ABILITY to use knowledge of phonetics in teaching correct speech responses.

ABILITY to assess the specific problems of each child with impaired hearing such as those involved in use of the telephone, adjustment to the speech patterns of particular teachers, communication under conditions of noise, participation in playground activities, and the like.

ABILITY to work cooperatively with others as a member of a team in planning, executing, and evaluating the overall educational and activity program and the associated professional services for each child with impaired hearing.

ABILITY to initiate and maintain effective working relationships with other professional personnel, such as physicians, psychologists, audiologists, speech correctionists, and social workers.

ABILITY to maintain and interpret adequate cumulative records of diagnostic tests, instructional activities, and examination procedures involved in the continuous evaluation of the effectiveness of the program for each child.

ABILITY to present clearly, interestingly, and with adequate interpretation the school program for children with impaired hearing to parent-teacher meetings, service clubs, civic organizations, and the general public through the press, radio, television, and by other means.

## CONCLUDING REMARKS

We believe that every child with a hearing impairment has an inherent right to be accepted on his merits along with other children

in his environment, and to enjoy an education that provides not only the basic elements of well-rounded instruction but also the compensatory and supplementary services and training that he requires because of his hearing impairment. We believe that a qualified special teacher, working cooperatively with the home, the school, and special agencies can contribute effectively to a happy and successful life in a hearing world for the child who has a hearing impairment.

# APPENDIX

## RECENT PUBLICATIONS ON THE PREPARATION OF TEACHERS OF THE HEARING IMPAIRED


Babbidge, Homer D. (chairman) *Education of the Deaf,* A Report to the Secretary of Health, Education, and Welfare by his Advisory Committee on Education of the Deaf, Washington, D. C.

Fellendorf, George W. (ed), *Bibliography on Deafness.* Washington, D. C.: Alexander Graham Bell Association for the Deaf, 1966, pp. 119-120

Hoag, Ralph L., "Training for Teachers of the Deaf," *School Life,* January 1963 (OE 35046)

Quigley, Stephen P. (ed), *Preparation of Teachers of the Deaf,* Virginia Beach Conference, OE-35085, No. 8, Bulletin 1966

Withrow, Frank B. *Public Law 87-276: Its Effect on the Supply of Trained Teachers of the Deaf,* Volta Review, Vol 69, pp 656-663, Dec 1967.

*Professional Standards for Personnel in the Education of Exceptional Children,* A Report of the Professional Standards Project, Washington, D. C., The Council for Exceptional Children, National Education Association, 1966

*Education of the Deaf; The Challenge and the Charge,* A Report of the National Conference on Education of the Deaf, Colorado Springs, Colorado, April 12-15, 1967, U.S. Department of H.E.W., Washington, D. C.